

# Java Threads

- In Java, a thread is an object of type `Thread`
- Creating a thread
  - Write a class that inherits from `Thread`
  - Implement the `Runnable` interface and pass to `Thread`'s constructor
    - `Runnable` defines a single method `void run()`

# Thread Operations

- Starting a thread `t`
  - `t.start()` spawns a new thread of execution to concurrently execute `run()`
- Suspend the current thread for `n` milliseconds
  - `Thread.sleep(n);`

# Single Java Thread

```
public class Threads {  
    public static void main(String[] args) {  
        // Anonymous class definition  
        Thread myThread = new Thread(new Runnable() {  
            // run() is the thread's "main" method and called by start()  
            @Override  
            public void run() {  
                try {  
                    for (int i = 0; i < 5; i++) {  
                        System.out.println("Hello " + i);  
                        Thread.sleep(1000); // Wait for 1 second  
                    }  
                } catch (InterruptedException e) {  
                    // Thrown by Thread.sleep when it's interrupted  
                }  
            }  
        });  
        // This starts the thread  
        myThread.start();  
        System.out.println("New thread runs in parallel!");  
    }  
}
```